

GARY R. HERBERT

Lieutenant Governor

State of Utah

DEPARTMENT OF NATURAL RESOURCES

AICHAEL R. STYLER
Executive Director

Division of Water Rights

JERRY D. OLDS

State Engineer/Division Director

November 2, 2007

Connely Baldwin, Hydrologist PacifiCorp 1407 West North Temple Salt Lake City, UT 84114

Re:

Santa Clara River, Pacificorp Measuring Devices and Headgates

SEAA 1248

Dear Connely:

This letter is to follow up on our recent phone conversation.

Attached is a copy of the distribution order that was issued by the State engineer to Utah Power and Light who was the predecessor to Pacificorp (power company). That order required the installation of measuring devices, measurement and reporting of diversion and canal flow data, and the evaluation and limitation of losses in the canals. The order required that the measurement data and evaluation of losses be reported to the Division of Water Rights (division), however, our records do not indicate that this has been reported. The power company is hereby required to submit by January 4, 2008, an evaluation of system losses by canal section along with the measurement data gathered at the following locations for the past 10 years:

- 1. Flume near Baker Campground
- 2. Flume Above Veyo Power Plant
- 3. Flume below Veyo Power Plant
- 4. Highway Flume
- 5. Flume above Upper Sand Cove Reservoir
- 6. Flume below Gunlock Tailrace

In the future, the power company is required to submit the measurement data for the above locations to the Division on a monthly basis; the data should be delivered to Mike Silva, distribution engineer. If desired, we can arrange to have the power company input the data directly to the divisions database through the divisions website.

This requirement may be partially met through a project being implemented by the Washington County Water Conservancy District (district). The district has received a Water 2025 Grant from the Bureau of Reclamation and is in the process of installing real-time telemetry on the water measuring devices at the diversions from the Santa Clara River. The state engineer is fully supportive of real time telemetry for water measurement and is encouraging its implementation throughout the state. The division has contributed to the Santa Clara telemetry project and believes it will improve water distribution and regulation. We expect the power company will cooperate with the district in the installation of this equipment without the necessity of issuing a distribution order requiring it.

1594 West North Temple, Suite 220, PO Box 146300, Salt Lake City, UT 84114-6300 telephone (801) 538-7240 • facsimile (801) 538-7467 • TTY (801) 538-7458 • www.waterriok

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Division staff recently conducted a review of the measuring devices and control structures on the power company canals. The maintenance and improvement items the power company is required to address are listed below:

1. Power Company Ditch Flume near Baker Camp Ground:

- · Lack of stilling area in front of weir causes excessive velocity in flume
- Calibrate Staff Gage measuring height in stilling well with actual in depth in flume
- Clean or replace staff gage to make it legible (and calibrate as above)
- Remove moss growth at flume entrance
- Remove vegetation around flume area

2. Flume above Veyo Power Plant & Diversion from Santa Clara River

- Wood gate at the power company ditch diversion has no lockable headgate control. Replace the wood diversion gates with a substantial and lockable metal gate control.
- Dry dam across river has a wooden gate which has bowed and failed. Replace the river gate with a substantial and lockable metal gate control.
- Flume below diversion (above Veyo Power Plant) has excessive growth of thorny vegetation that needs to be removed
- Lack of stilling area and sand deposits in along the wing walls in front of the flume causes excessive velocity. Flume entrance needs to be cleaned of both sediment and vegetation
- Staff Gage is mounted sideways with one screw and must be swung down to get a measurement, this is complicated by thorny vegetation in the area. Securely mount staff gage and calibrate it with the bottom of the flume

3. Flume Below Veyo Power Plant

- Flume below diversion has excessive growth of thorny vegetation
- Lack of entrance stilling area and sand deposits in along the wing walls in front of weir causes excessive velocity in flume.
- Flume entrance needs to be cleaned of moss and sediment
- Calibrate Staff Gage measuring height in stilling well with actual in depth in flume

4. Highway Crossing Flume

- Debris, vegetation and Moss contribute to excessive velocity in this flume
- Gravel bar below the flume needs to be removed
- Moss at the flume entrance needs to be removed

5. Flume Above Sand Cove Reservoir.

- Excessive sand has filled in both the entrance and exit ways for this flume causing it to be submerged. The channel needs to be cleaned to allow free flow conditions.
- Cattail growth above and below the flume should be removed at the same time. Remove growth around the sides of the flume.

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6. Re-diversion Structure below Sand Cove Generating Station:

The Plywood gate should be replaced with a substantial metal gate and mechanism.

7. Flume below Gunlock Power Station Tailrace

- Flume was recently reinstalled after flooding, however stilling well leaks and is not accurate. Repair Stilling basin, remove rocks and replace/clean staff gage.
- Access to weir is treacherous due to loose rocky slope; improve access to flume to make it safe.
- Water is flowing around, under flume, flume needs wing walls and threshold along with entrance stilling basin to reduce entrance velocity for proper operation.

The power company is required to complete these repair and maintenance items by January 4, 2008. If it appears compliance by that date will pose an undue burden on the power company, a written request for an extension of time within which to comply may be submitted. The request must be submitted by December 1, 2007 and must include justification for an extension of time and a proposed schedule for completing the required work.

Failure to comply with the requirements of this notice will result in the issuance of a State Engineer Distribution Order and possible enforcement action in accordance with Sections 73-2-25 and 73-2-26 Utah Code, annotated.

If you have any questions regarding this notice please contact me by phone at (801) 538-7380 or by e-mail at <u>LeeSim@utah.gov</u> or Mike Silva, Distribution Engineer for the Santa Clara River, by phone at (801) 538-7430 or by e-mail at <u>MikeSilva@utah.gov</u>.

Respectfully,

Assistant State Engineer

Cc: Kurt Vest, Regional Engineer

Rod Leavitt, Water Commissioner

Ron Thompson, Washington County Water Conservancy District

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